

APPENDIX B: (Clean Version of Amended Claims)

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Claim 1. (Amended) A process of preparing a catalyst composition comprising gold on a titanium-containing support, the process comprising impregnating a gold compound and a reducing agent onto a catalyst support, wherein the reducing agent comprises titanium, or the catalyst support comprises titanium, or both the reducing agent and the catalyst support comprise titanium, under conditions sufficient to prepare the catalyst composition.

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Claim 2. (Amended) The process of Claim 1 wherein the gold compound is selected from the group consisting of chloroauric acid, sodium chloroaurate, potassium chloroaurate, gold cyanide, potassium gold cyanide, diethylamine auric acid trichloride, gold acetate, alkyl gold halides, and alkali aurates.

Claim 3. (Amended) The process of Claim 1 wherein the process is conducted at a gold loading greater than about 10 parts per million by weight, based on the total weight of the gold and support.

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Claim 12. (Amended) The process of Claim 11 wherein the organotitanium compound is selected from the group consisting of alkyltitanium compounds and cyclopentadienyl titanium compounds.

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Claim 14. (Amended) The process of Claim 13 wherein the titanium coordination compound is selected from the group consisting of titanium alkoxides and titanium carboxylates.

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Claim 17. (Amended) The process of Claim 10 wherein the process is conducted at a titanium loading of the titanium-containing reducing agent greater than 0.02 weight percent and less than 20 weight percent, based on the weight of the support.

Claim 18. (Amended) The process of Claim 1 wherein the catalyst support is selected from the group consisting of titanium dioxide, titanosilicates, titanium dispersed on silica, promoter metal titanates, titanium dispersed on promoter metal silicates, and mixtures thereof.

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Claim 19. (Amended) The process of Claim 1 wherein the reducing agent contains titanium and the support is selected from the group consisting of silicas, aluminas, aluminosilicates, zirconia, magnesia, carbon, titania, and mixtures thereof.

Claim 20. (Amended) The process of Claim 1 wherein the process is conducted at a titanium loading on the support of greater than 0.02 weight percent and less than 20 weight percent, based on the weight of the support.

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Claim 23. (Amended) The process of Claim 22 wherein the promoter metal is selected from the group consisting of silver, Group 1, Group 2, the lanthanide rare earth metals, the actinide metals of the Periodic Table, and mixtures thereof.

Claim 24. (Amended) The process of Claim 22 wherein the total concentration of promoter metal or metals ranges from greater than about 0.01 to less than about 20 weight percent, based on the total weight of the catalyst.

Claim 25. (Amended) The process of Claim 1 wherein the solvent for the impregnation is selected from the group consisting of water, organic solvents, and mixtures thereof.

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Claim 30. (Amended) The process of Claim 1 wherein after impregnation and any additional steps of washing and treating with a promoter metal, the catalyst is heated.
